## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024120

Address: 333 Burma Road **Date Inspected:** 31-May-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China

**CWI Name:** Shi Yu **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

### Bay 1

This QA Inspector observed the following work in progress for Bay 1.

ZPMC perform FCAW welding on lifting lug and grinding work on the hand rail and lifting lug,

#### Bay 9

This QA Inspector observed the following work in progress for Bay 9.

ZPMC perform grinding work on the hand rail, Traveler rail and fit up on traveler rail support.

## Bay 11

This QA Inspector observed the following work in progress for Bay 11.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Mao Bin Bin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: Bike Path

PCMK: Bk011A8-001-025,027

Welder: 058026

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#### WPS-B-P-2113

Bay 14

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhu Lin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: Traveler rail PCMK: TR3002TR2-001-015

Welder: 067752 Report: B-WR21056

WPS-345-SMAW-2G (2F)-Repair-1

PCMK: TR3001TR2-001-046

Welder: 045268 Report: B-WR20785

WPS-345-SMAW-2G (2F)-Repair-1

PCMK: TR3001TR1-001-013

Welder: 037779 Report: B-WR0843

WPS-345-SMAW-2G (2F)-Repair-1

Heat straightening of PCMK, TR3027TR1-001, under approved Heat Straightening procedure, HSR 1 (B)-10278, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhu Lin. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 6mm.

Bay 16

This QA Inspector observed the following work in progress for Bay 16.

ZPMC perform FCAW welding on lifting lug and grinding work on the hand rail,

Bay 19

This QA Inspector observed the following work in progress for Bay 19.

ZPMC perform grinding work on the BK24A3,

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; Bike Path BK25A on item number 1 of NWIT tracker document # 09319,

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.





# **Summary of Conversations:**

No relevant conversations

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer